REMARKS

Favorable reconsideration of this application, as amended, is respectfully requested.

Applicants respectfully request acknowledgment of their claim of foreign priority and the filing of the certified copy of priority Japanese Appln. No. 2001-276000. The certified copy was filed on or about April 5, 2002 (copy of postcard receipt attached).

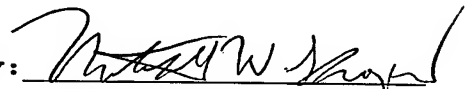
The Examiner's indication of allowable subject matter in Claims 8 and 9 is acknowledged with appreciation. Without acceding to the rejection of Claims 4 and 7-10, Claims 8 and 9 have been rewritten in independent form, and the rejected claims have been cancelled in order to expedite the issuance of Claims 8 and 9. The cancellation of claims is without prejudice or disclaimer and with express reservation of Applicants' right to file one or more continuing applications.

Accordingly, this application should now be passed issue.

The Commissioner is hereby authorized to charge to Deposit Account No. 50-1165 any fees under 37 C.F.R. §§ 1.16 and 1.17 that may be required by this paper and to

credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and has not been requested separately, such extension is hereby requested.

Respectfully submitted,

By: 
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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (withdrawn) A non-volatile storage device comprising a controller, a buffer memory, and a non-volatile memory,

wherein, in response to control information from an external unit, said controller stores first data, entered from the external unit, into a first area of said buffer memory, controls a storage of the stored data further into a specified area of said non-volatile memory and, concurrently with the control of the storage into said non-volatile memory, may store second data, entered from the external unit, into the first area of said buffer memory.

2. (withdrawn) A non-volatile storage device comprising a controller, a volatile memory, and a non-volatile memory,

wherein, in response to control information from an external unit, said controller stores data, which is entered from the external unit, into said volatile memory

and then controls a storage of the stored-data into said non-volatile memory,

wherein said non-volatile memory comprises a plurality of word lines and a plurality of non-volatile memory cells and a data latch connected to each word line, the storage of data into said non-volatile memory being done by selecting one of the word lines and by storing the data, at a time, into the non-volatile memory cells connected to the selected word line, said data latch being able to latch data with a number of bits required to store data, at a time, into said non-volatile memory cells connected to the selected word line,

wherein said volatile memory is divided into a first area and a second area, the first area being used for processing performed by said controller, the second area being used to store data entered from the external unit, and

wherein said controller stores the data, which is entered from the external unit, into the second area of said volatile memory, sequentially transfers the data, which is stored in the second area, to the data latch beginning with a start of the data for storing the data into said non-volatile memory and, when the entered data is

stored in the whole second area of said volatile memory, next data is stored, beginning with a start of the second area, into an area in the second area from which the data has been transferred to said data latch.

3. (withdrawn) A data storage method for use on a non-volatile storage device comprising a controller, a volatile memory, and a non-volatile memory,

wherein data is stored into said non-volatile memory, a first data length at a time, and

wherein said controller executes the steps of:

(1) receiving data from an external unit;

(2) storing the received data into said volatile memory;

(3) transferring a data storage instruction signal and data with a first data length, stored in said volatile memory, to said non-volatile memory;

(4) receiving, from the external unit, data following the data which has been stored in said volatile memory, storing the received data into said volatile memory and, when the data received from the external unit is stored in a whole area of said volatile memory prepared for storing data, storing the data received from the external unit into

an area where the data already transferred to said non-volatile memory has been stored; and

(5) after the data has been stored into said non-volatile memory, repeating said third step and said fourth step.

4-7 (canceled)

8. (currently amended) A non-volatile storage device ~~according to claim 7, further~~ comprising:

a controller, a buffer memory, and a non-volatile memory,

wherein said buffer memory comprises a plurality of banks, and

wherein, in response to control information from an external unit, said controller stores first data, which is entered from the external unit, sequentially into the banks of said buffer memory and then further stores the stored data into a specified area of said non-volatile memory and, concurrently with the storage of data into said non-volatile memory, stores second data, which is entered from the external unit, into a bank of said buffer memory from

which data has been transferred to said non-volatile memory;

a status register or a status flag indicating a completion/incompletion of the data transfer from said buffer memory to said non-volatile memory, the status register or status flag being controlled by said controller and indicating, for each bank, the completion/incompletion of the data transfer to said non-volatile memory;

a first register containing information on a bank into which data is being entered from the external unit; and

a second register containing information on a bank from which data is being transferred from said buffer memory to said non-volatile memory,

wherein said controller judges the completion/incompletion of the data transfer to or from each bank, based on the bank information in said first register and said second register, to control said status register or said status flag.

9. (currently amended) A non-volatile storage device ~~according to claim 7, further~~ comprising:

a controller, a buffer memory, and a non-volatile memory,

wherein said buffer memory comprises a plurality of banks, and

wherein, in response to control information from an external unit, said controller stores first data, which is entered from the external unit, sequentially into the banks of said buffer memory and then further stores the stored data into a specified area of said non-volatile memory and, concurrently with the storage of data into said non-volatile memory, stores second data, which is entered from the external unit, into a bank of said buffer memory from which data has been transferred to said non-volatile memory;

a status register or a status flag indicating a completion/incompletion of the data transfer from said buffer memory to said non-volatile memory, the status register or status flag being controlled by said controller and indicating, for each bank, the completion/incompletion of the data transfer to said non-volatile memory; and

a flag, for each bank, indicating whether or not the corresponding bank has data to be transferred to said non-volatile memory,

wherein said controller judges the completion/incompletion of the data transfer to or from

each bank, based on the flag status, to control said status register or said status flag.

10 (canceled)